

## EAST Search History

| Ref # | Hits | Search Query   | DBs                          | Default Operator | Plurals | Time Stamp       |
|-------|------|--|------------------------------|------------------|---------|------------------|
| L15   | 6    | ((("20040041686") or ("6031815") or ("6223285") or ("6289102") or ("5706268") or ("5818805"))).PN. | US-PGPUB;<br>USPAT;<br>USOCR | OR               | OFF     | 2007/04/03 12:05 |
| L16   | 2    | ((("20030007432") or ("5809006"))).PN.   | US-PGPUB;<br>USPAT;<br>USOCR | OR               | OFF     | 2007/04/03 12:20 |
| L17   | 3209 | (369/47.21,52.1,53.21,59.25,275.3).cccls.  | US-PGPUB;<br>USPAT;<br>USOCR | OR               | ON      | 2007/04/03 12:20 |
| S1    | 1    | 10/762538  | US-PGPUB;<br>USPAT;<br>USOCR | OR               | ON      | 2007/03/29 17:46 |

## EAST Search History

|                      |    |   |                    |    |    |                  |
|----------------------|----|---|--------------------|----|----|------------------|
| S2                   | 98 | (US-20040141454-\$ or<br>US-20040165494-\$ or<br>US-20040168074-\$ or<br>US-20040246854-\$ or<br>US-20040246867-\$ or<br>US-20040252603-\$ or<br>US-20060164944-\$ or<br>US-20030048735-\$ or<br>US-20030161248-\$ or<br>US-20060171287-\$).did. or<br>(US-5296995-\$ or US-5680381-\$<br>or US-5729523-\$ or US-5903533-\$<br>or US-5835478-\$ or US-5835461-\$<br>or US-5878024-\$ or US-5886985-\$<br>or US-5309424-\$ or US-5715232-\$<br>or US-6144625-\$ or US-5469416-\$<br>or US-5587901-\$ or US-5949746-\$<br>or US-6067281-\$ or US-6192018-\$<br>or US-6301208-\$ or US-6407978-\$<br>or US-6898171-\$ or US-6950386-\$<br>or US-6189014-\$ or US-5218599-\$<br>or US-5696758-\$ or US-5995457-\$<br>or US-4931336-\$ or<br>US-5321673-\$).did. or<br>(US-5392271-\$ or US-5455815-\$<br>or US-5517486-\$ or US-5708650-\$<br>or US-5752009-\$ or US-5805548-\$<br>or US-5812519-\$ or US-5871855-\$<br>or US-6103407-\$ or US-4892692-\$<br>or US-5258976-\$ or US-5268883-\$<br>or US-5316814-\$ or US-5326679-\$<br>or US-5328741-\$ or US-5391413-\$<br>or US-5418768-\$ or US-5418852-\$<br>or US-5467327-\$ or US-5469415-\$<br>or US-5473480-\$ or US-5494778-\$<br>or US-5497367-\$ or US-5506398-\$<br>or US-5568467-\$ or US-5608717-\$<br>or US-5608701-\$).did. or<br>(US-5617408-\$ or US-5673152-\$<br>or US-5715222-\$ or US-5737306-\$<br>or US-5740153-\$ or US-5751671-\$<br>or US-5781526-\$ or US-5802174-\$<br>or US-5802027-\$ or US-5809545-\$<br>or US-5808987-\$ or US-5808974-\$<br>or US-5815333-\$ or US-5841861-\$<br>or US-5875156-\$ or US-5907525-\$<br>or US-5926446-\$ or US-5930217-\$<br>or US-5949751-\$ or US-5982886-\$<br>or US-6083667-\$ or US-6122245-\$<br>or US-6128272-\$ or US-6188657-\$<br>or US-6215758-\$ or US-6223247-\$<br>or US-6301210-\$).did. or<br>(US-6438078-\$ or US-6438098-\$<br>or US-6671249-\$ or US-6772429-\$<br>or US-6813237-\$ or US-6850469-\$<br>or US-6906993-\$ or<br>US-6930977-\$).did. | US-PGPUB;<br>USPAT | OR | ON | 2007/01/31 09:12 |
| 4/3/2007 12:21:49 PM |    | C:\Documents and Settings\BColeman1\My Documents\EAST\Workspaces\10762538.wsp   |                    |    |    | Page 2           |

## EAST Search History

|   |    |   |                    |    |    |                  |
|---|----|---|--------------------|----|----|------------------|
| S3  | 98 | (US-20040141454-\$ or<br>US-20040165494-\$ or<br>US-20040168074-\$ or<br>US-20040246854-\$ or<br>US-20040246867-\$ or<br>US-20040252603-\$ or<br>US-20060164944-\$ or<br>US-20030048735-\$ or<br>US-20030161248-\$ or<br>US-20060171287-\$).did. or<br>(US-5296995-\$ or US-5680381-\$<br>or US-5729523-\$ or US-5903533-\$<br>or US-5835478-\$ or US-5835461-\$<br>or US-5878024-\$ or US-5886985-\$<br>or US-5309424-\$ or US-5715232-\$<br>or US-6144625-\$ or US-5469416-\$<br>or US-5587901-\$ or US-5949746-\$<br>or US-6067281-\$ or US-6192018-\$<br>or US-6301208-\$ or US-6407978-\$<br>or US-6898171-\$ or US-6950386-\$<br>or US-6189014-\$ or US-5218599-\$<br>or US-5696758-\$ or US-5995457-\$<br>or US-4931336-\$ or<br>US-5321673-\$).did. or<br>(US-5392271-\$ or US-5455815-\$<br>or US-5517486-\$ or US-5708650-\$<br>or US-5752009-\$ or US-5805548-\$<br>or US-5812519-\$ or US-5871855-\$<br>or US-6103407-\$ or US-4892692-\$<br>or US-5258976-\$ or US-5268883-\$<br>or US-5316814-\$ or US-5326679-\$<br>or US-5328741-\$ or US-5391413-\$<br>or US-5418768-\$ or US-5418852-\$<br>or US-5467327-\$ or US-5469415-\$<br>or US-5473480-\$ or US-5494778-\$<br>or US-5497367-\$ or US-5506398-\$<br>or US-5568467-\$ or US-5608717-\$<br>or US-5608701-\$).did. or<br>(US-5617408-\$ or US-5673152-\$<br>or US-5715222-\$ or US-5737306-\$<br>or US-5740153-\$ or US-5751671-\$<br>or US-5781526-\$ or US-5802174-\$<br>or US-5802027-\$ or US-5809545-\$<br>or US-5808987-\$ or US-5808974-\$<br>or US-5815333-\$ or US-5841861-\$<br>or US-5875156-\$ or US-5907525-\$<br>or US-5926446-\$ or US-5930217-\$<br>or US-5949751-\$ or US-5982886-\$<br>or US-6083667-\$ or US-6122245-\$<br>or US-6128272-\$ or US-6188657-\$<br>or US-6215758-\$ or US-6223247-\$<br>or US-6301210-\$).did. or<br>(US-6438078-\$ or US-6438098-\$<br>or US-6671249-\$ or US-6772429-\$<br>or US-6813237-\$ or US-6850469-\$<br>or US-6906993-\$ or<br>US-6930977-\$).did. | US-PGPUB;<br>USPAT | OR | ON | 2007/01/31 09:13 |
| 4/3/2007 12:21:49 PM<br>C:\Documents and Settings\B Coleman\My Documents\ |    | EAST\Workspaces\10762538.wsp  |                    |    |    | Page 3           |

## EAST Search History

|    |      |  |                              |    |    |                  |
|----|------|--|------------------------------|----|----|------------------|
| S4 | 3    | S3 and (pit near3 (left or right))<br>with (groove or track) | US-PGPUB;<br>USPAT;<br>USOCR | OR | ON | 2007/01/31 09:14 |
| S5 | 4139 | (369/275.1-275.4).ccls.                                      | US-PGPUB;<br>USPAT;<br>USOCR | OR | ON | 2007/01/31 14:34 |

## EAST Search History

|                      |    |   |                    |    |    |                  |
|----------------------|----|---|--------------------|----|----|------------------|
| S6                   | 98 | (US-20040141454-\$ or<br>US-20040165494-\$ or<br>US-20040168074-\$ or<br>US-20040246854-\$ or<br>US-20040246867-\$ or<br>US-20040252603-\$ or<br>US-20060164944-\$ or<br>US-20030048735-\$ or<br>US-20030161248-\$ or<br>US-20060171287-\$).did. or<br>(US-5296995-\$ or US-5680381-\$<br>or US-5729523-\$ or US-5903533-\$<br>or US-5835478-\$ or US-5835461-\$<br>or US-5878024-\$ or US-5886985-\$<br>or US-5309424-\$ or US-5715232-\$<br>or US-6144625-\$ or US-5469416-\$<br>or US-5587901-\$ or US-5949746-\$<br>or US-6067281-\$ or US-6192018-\$<br>or US-6301208-\$ or US-6407978-\$<br>or US-6898171-\$ or US-6950386-\$<br>or US-6189014-\$ or US-5218599-\$<br>or US-5696758-\$ or US-5995457-\$<br>or US-4931336-\$ or<br>US-5321673-\$).did. or<br>(US-5392271-\$ or US-5455815-\$<br>or US-5517486-\$ or US-5708650-\$<br>or US-5752009-\$ or US-5805548-\$<br>or US-5812519-\$ or US-5871855-\$<br>or US-6103407-\$ or US-4892692-\$<br>or US-5258976-\$ or US-5268883-\$<br>or US-5316814-\$ or US-5326679-\$<br>or US-5328741-\$ or US-5391413-\$<br>or US-5418768-\$ or US-5418852-\$<br>or US-5467327-\$ or US-5469415-\$<br>or US-5473480-\$ or US-5494778-\$<br>or US-5497367-\$ or US-5506398-\$<br>or US-5568467-\$ or US-5608717-\$<br>or US-5608701-\$).did. or<br>(US-5617408-\$ or US-5673152-\$<br>or US-5715222-\$ or US-5737306-\$<br>or US-5740153-\$ or US-5751671-\$<br>or US-5781526-\$ or US-5802174-\$<br>or US-5802027-\$ or US-5809545-\$<br>or US-5808987-\$ or US-5808974-\$<br>or US-5815333-\$ or US-5841861-\$<br>or US-5875156-\$ or US-5907525-\$<br>or US-5926446-\$ or US-5930217-\$<br>or US-5949751-\$ or US-5982886-\$<br>or US-6083667-\$ or US-6122245-\$<br>or US-6128272-\$ or US-6188657-\$<br>or US-6215758-\$ or US-6223247-\$<br>or US-6301210-\$).did. or<br>(US-6438078-\$ or US-6438098-\$<br>or US-6671249-\$ or US-6772429-\$<br>or US-6813237-\$ or US-6850469-\$<br>or US-6906993-\$ or<br>US-6930977-\$).did. | US-PGPUB;<br>USPAT | OR | ON | 2007/01/31 14:34 |
| 4/3/2007 12:21:49 PM |    | C:\Documents and Settings\B Coleman\My Documents\EAST\Workspaces\10762538.wsp.<br>US-6930977-\$).did.   |                    |    |    | Page 5           |

## EAST Search History

|     |          |  |                              |    |    |                  |
|-----|----------|--|------------------------------|----|----|------------------|
| S7  | 3        | S6 and (pit near3 (left or right)) with (groove or track)  | US-PGPUB;<br>USPAT;<br>USOCR | OR | ON | 2007/01/31 14:34 |
| S8  | 2        | S5 and S7  | US-PGPUB;<br>USPAT;<br>USOCR | OR | ON | 2007/01/31 14:34 |
| S9  | 549      | S5 and (pit near3 (straddle or side or outside or inside or adjacent or left or right) with (groove or track)) | US-PGPUB;<br>USPAT;<br>USOCR | OR | ON | 2007/01/31 14:36 |
| S10 | 524      | S5 and (pit near3 (straddle or side or outside or inside or adjacent) with (groove or track))                  | US-PGPUB;<br>USPAT;<br>USOCR | OR | ON | 2007/01/31 15:41 |
| S11 | 4139     | (369/275.1-275.4).ccls.  | US-PGPUB;<br>USPAT;<br>USOCR | OR | ON | 2007/01/31 15:41 |
| S12 | 313      | S11 and (pit near3 (straddle or side or outside or inside) with (groove or track))                             | US-PGPUB;<br>USPAT;<br>USOCR | OR | ON | 2007/01/31 16:05 |
| S13 | 56       | S11 and wobbled adj pit  | US-PGPUB;<br>USPAT;<br>USOCR | OR | ON | 2007/01/31 16:05 |
| S14 | 9453     | (alternate intermittent) with (wobbl\$5 near\$3 pit)   | US-PGPUB;<br>USPAT;<br>USOCR | OR | ON | 2007/03/29 17:48 |
| S15 | 326      | S14 and "369".clas.  | US-PGPUB;<br>USPAT;<br>USOCR | OR | ON | 2007/03/29 17:48 |
| S16 | 2720592  | (alternate intermittent) near\$5 (wobbl\$5 near\$3 pit)  | US-PGPUB;<br>USPAT;<br>USOCR | OR | ON | 2007/03/29 17:49 |
| S17 | 24203    | S16 and "369".clas.  | US-PGPUB;<br>USPAT;<br>USOCR | OR | ON | 2007/03/29 17:49 |
| S18 | 13109127 | not S14  | US-PGPUB;<br>USPAT;<br>USOCR | OR | ON | 2007/03/29 17:49 |
| S19 | 23877    | S17 not S14  | US-PGPUB;<br>USPAT;<br>USOCR | OR | ON | 2007/03/29 17:49 |
| S20 | 2940059  | (alternate alternately intermittent) near\$2 (wobbl\$5 near\$3 pit)  | US-PGPUB;<br>USPAT;<br>USOCR | OR | ON | 2007/03/29 17:51 |
| S21 | 220885   | S20 not S16  | US-PGPUB;<br>USPAT;<br>USOCR | OR | ON | 2007/03/29 17:50 |

## EAST Search History

|     |         |   |                              |    |    |                  |
|-----|---------|---|------------------------------|----|----|------------------|
| S22 | 1303    | S21 and "369".clas.   | US-PGPUB;<br>USPAT;<br>USOCR | OR | ON | 2007/03/29 17:51 |
| S23 | 2940059 | ((alternate alternately<br>intermittent) near\$2 (wobbl\$5<br>near\$3 pit)) | US-PGPUB;<br>USPAT;<br>USOCR | OR | ON | 2007/03/29 17:52 |
| S24 | 1251244 | (alternate alternately intermittent)  | US-PGPUB;<br>USPAT;<br>USOCR | OR | ON | 2007/03/29 17:52 |
| S25 | 2182887 | (wobbl\$5 near\$3 pit)  | US-PGPUB;<br>USPAT;<br>USOCR | OR | ON | 2007/03/29 17:52 |
| S26 | 2940059 | S24 near\$2 S25   | US-PGPUB;<br>USPAT;<br>USOCR | OR | ON | 2007/03/29 17:53 |
| S27 | 1540    | S24 near2 S25   | US-PGPUB;<br>USPAT;<br>USOCR | OR | ON | 2007/03/29 17:53 |
| S28 | 289     | S27 and "369".clas.   | US-PGPUB;<br>USPAT;<br>USOCR | OR | ON | 2007/03/29 17:54 |
| S29 | 1251244 | (alternate alternately intermittent)  | US-PGPUB;<br>USPAT;<br>USOCR | OR | ON | 2007/03/30 10:04 |
| S30 | 2182887 | (wobbl\$5 near\$3 pit)  | US-PGPUB;<br>USPAT;<br>USOCR | OR | ON | 2007/03/30 10:04 |
| S31 | 1540    | S29 near2 S30   | US-PGPUB;<br>USPAT;<br>USOCR | OR | ON | 2007/03/30 10:04 |
| S32 | 289     | S31 and "369".clas.   | US-PGPUB;<br>USPAT;<br>USOCR | OR | ON | 2007/03/30 10:19 |
| S33 | 252     | pit near10 (shift\$3 near5 track)   | US-PGPUB;<br>USPAT;<br>USOCR | OR | ON | 2007/03/30 14:39 |
| S34 | 252     | pit near10 (shift\$3 near5 track)   | US-PGPUB;<br>USPAT;<br>USOCR | OR | ON | 2007/03/30 11:35 |
| S35 | 1251244 | (alternate alternately intermittent)  | US-PGPUB;<br>USPAT;<br>USOCR | OR | ON | 2007/03/30 10:39 |
| S36 | 2182887 | (wobbl\$5 near\$3 pit)  | US-PGPUB;<br>USPAT;<br>USOCR | OR | ON | 2007/03/30 10:39 |

## EAST Search History

|     |       |   |                              |    |    |                  |
|-----|-------|---|------------------------------|----|----|------------------|
| S37 | 1540  | S35 near2 S36   | US-PGPUB;<br>USPAT;<br>USOCR | OR | ON | 2007/03/30 10:39 |
| S38 | 289   | S37 and "369".clas.   | US-PGPUB;<br>USPAT;<br>USOCR | OR | ON | 2007/03/30 10:39 |
| S39 | 24    | S34 and ((copy near2 protect\$3)<br>copyright pira\$4)      | US-PGPUB;<br>USPAT;<br>USOCR | OR | ON | 2007/03/30 12:03 |
| S40 | 89910 | (copy near2 protect\$3) copyright<br>pira\$4                | US-PGPUB;<br>USPAT;<br>USOCR | OR | ON | 2007/03/30 12:01 |
| S41 | 5981  | ((control near2 (data information))<br>near2 (area region)) | US-PGPUB;<br>USPAT;<br>USOCR | OR | ON | 2007/03/30 12:02 |
| S42 | 2     | S34 same S41  | US-PGPUB;<br>USPAT;<br>USOCR | OR | ON | 2007/03/30 12:03 |
| S43 | 5     | S34 same ((copy near2 protect\$3)<br>copyright pira\$4)     | US-PGPUB;<br>USPAT;<br>USOCR | OR | ON | 2007/03/30 13:29 |
| S44 | 2     | 10/023062   | US-PGPUB;<br>USPAT;<br>USOCR | OR | ON | 2007/03/30 13:29 |
| S45 | 235   | pit near10 (deviat\$3 near5 track)                          | US-PGPUB;<br>USPAT;<br>USOCR | OR | ON | 2007/03/30 15:05 |
| S46 | 89910 | (copy near2 protect\$3) copyright<br>pira\$4                | US-PGPUB;<br>USPAT;<br>USOCR | OR | ON | 2007/03/30 14:42 |
| S47 | 45    | S45 and S46   | US-PGPUB;<br>USPAT;<br>USOCR | OR | ON | 2007/03/30 15:04 |
| S48 | 4     | S45 same S46  | US-PGPUB;<br>USPAT;<br>USOCR | OR | ON | 2007/03/30 15:11 |
| S49 | 118   | pit near10 (displace\$4 near5<br>track)                     | US-PGPUB;<br>USPAT;<br>USOCR | OR | ON | 2007/03/30 15:11 |
| S50 | 0     | S49 same S46  | US-PGPUB;<br>USPAT;<br>USOCR | OR | ON | 2007/03/30 15:11 |
| S51 | 16    | S49 and S46   | US-PGPUB;<br>USPAT;<br>USOCR | OR | ON | 2007/03/30 15:12 |



## EAST Search History

|     |       |   |                              |    |    |                  |
|-----|-------|---|------------------------------|----|----|------------------|
| S52 | 252   | pit near10 (shift\$3 near5 track)                   | US-PGPUB;<br>USPAT;<br>USOCR | OR | ON | 2007/03/30 16:05 |
| S53 | 24026 | ((pit near5 straight align\$4) near5 track)         | US-PGPUB;<br>USPAT;<br>USOCR | OR | ON | 2007/03/30 16:16 |
| S54 | 37    | S45 and S53   | US-PGPUB;<br>USPAT;<br>USOCR | OR | ON | 2007/03/30 16:09 |
| S55 | 20    | S49 and S53   | US-PGPUB;<br>USPAT;<br>USOCR | OR | ON | 2007/03/30 16:11 |
| S56 | 47    | S52 and S53   | US-PGPUB;<br>USPAT;<br>USOCR | OR | ON | 2007/03/30 16:15 |
| S57 | 1302  | ((pit near5 (straight align\$4 along)) near5 track) | US-PGPUB;<br>USPAT;<br>USOCR | OR | ON | 2007/03/30 16:16 |
| S58 | 81    | S45 and S57   | US-PGPUB;<br>USPAT;<br>USOCR | OR | ON | 2007/03/30 16:16 |
| S59 | 34    | S49 and S57   | US-PGPUB;<br>USPAT;<br>USOCR | OR | ON | 2007/03/30 16:16 |
| S60 | 68    | S52 and S57   | US-PGPUB;<br>USPAT;<br>USOCR | OR | ON | 2007/03/30 16:16 |
| S61 | 1     | 10/504322   | US-PGPUB;<br>USPAT;<br>USOCR | OR | ON | 2007/04/02 10:24 |
| S62 | 0     | 09-081938   | US-PGPUB;<br>USPAT;<br>USOCR | OR | ON | 2007/04/02 13:49 |
| S63 | 0     | "09081938"  | US-PGPUB;<br>USPAT;<br>USOCR | OR | ON | 2007/04/02 13:50 |
| S64 | 2     | 2000-391580   | US-PGPUB;<br>USPAT;<br>USOCR | OR | ON | 2007/04/02 13:51 |
| S65 | 16    | "391580"  | US-PGPUB;<br>USPAT;<br>USOCR | OR | ON | 2007/04/02 13:51 |
| S66 | 9     | "081938"  | US-PGPUB;<br>USPAT;<br>USOCR | OR | ON | 2007/04/02 13:52 |

## EAST Search History

|     |   |          |  |    |    |                  |
|-----|---|----------|--|----|----|------------------|
| S67 | 3 | 9-081938 | US-PGPUB;<br>USPAT;<br>USOCR                     | OR | ON | 2007/04/02 13:55 |
| S68 | 3 | 9-081938 | US-PGPUB;<br>USPAT;<br>USOCR;<br>JPO;<br>DERWENT | OR | ON | 2007/04/02 13:55 |